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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,687	10/18/2001	Stephen A. Loughran	10011308-1	8631

7590 08/13/2004
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

ZHEN, WEI Y

ART UNIT PAPER NUMBER

2122

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/982,687	Applicant(s) LOUGHRAN ET AL.	
	Examiner Wei Y Zhen	Art Unit 2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/18/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the application filed on 10/18/2001.
2. Claims 1-29 are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-9, 11-14, 16-17, 19-22, 24-27, 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller.

As per claim 1, Mueller discloses
setting a main processor to run in a debugging mode (Fig. 1 and col. 4 lines 26-42);
said main processor transmitting said debugging information word to a keyboard
controller; and transmitting, by said keyboard controller, said debugging information word using
a secondary bus coupled to said keyboard controller (Fig. 1 and col. 3 line 5 to col. 4 line 42).

As per claim 2, Mueller discloses wherein said keyboard controller and said main
processor communicate by way of a main processor bus (Fig. 1).

As per claim 4, Mueller discloses said secondary bus (Fig. 1) and said secondary bus
also inherently communicates with a battery that provides electrical power to said main
processor.

As per claim 5, Mueller discloses said main processor transmits debugging information

Art Unit: 2122

words to said keyboard controller only when said main processor operates in said debugging mode (Fig. 1 and col. 3 line 5 to col. 4 line 42).

As per claim 6, Mueller discloses additionally comprising receiving, by a converter interfaced to said secondary bus, said debugging information word transmitted from said keyboard controller (Fig. 1 and col. 3 line 5 to col. 4 line 42).

As per claim 7, Mueller discloses additionally comprising said converter transmitting said debugging information word to an external receiver (Fig. 1 and col. 3 line 5 to col. 4 line 42).

As per claim 8, Mueller discloses said debugging mode is a kernel mode of an operating system (Fig. 1, "Operating system Kernel 12").

Claim 9 is rejected for the reason set forth in the rejections of claims 1 and 8.

As per claim 11, Mueller discloses wherein said secondary bus interfaces with an adapter that receives said information words from a computing device external to said computer (Fig. 1 and col. 3 line 5 to col. 4 line 42).

Claim 12 is rejected for the reason set forth in the rejection of claim 5.

Claim 13 is rejected for the reason set forth in the rejection of claim 8.

Claim 14 is rejected for the reason set forth in the rejection of claim 4.

Claim 16 is rejected for the reason set forth in the rejection of claim 1.

Claim 17 is rejected for the reason set forth in the rejection of claim 2.

Claim 19 is rejected for the reason set forth in the rejection of claim 5.

Claim 20 is rejected for the reason set forth in the rejection of claim 7.

Claim 21 is rejected for the reason set forth in the rejection of claim 9.

Claim 22 is rejected for the reason set forth in the rejection of claim 2.

Art Unit: 2122

Claim 24 is rejected for the reason set forth in the rejection of claim 5.

Claim 25 is rejected for the reason set forth in the rejection of claim 7.

Claim 26 is rejected for the reason set forth in the rejection of claim 21.

Claim 27 is rejected for the reason set forth in the rejection of claim 4.

As per claim 29, (see Mueller, Fig. 1 and col. 3 line 5 to col. 4 line 42).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 10, 15, 18, 23, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller, U.S. Patent No. 5,463,764.

As per claim 3, Mueller does not explicitly disclose wherein said secondary bus is an inter-integrated circuit bus. However, an inter-integrated circuit bus was well known in the art at the time was made. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching of the well-known knowledge into Mueller to have said secondary bus be an inter-integrated circuit bus because one would want to utilize various types of communications channels to meet the requirement of various types of systems.

As per claim 10, Mueller does not explicitly disclose wherein the secondary bus does not interface directly with said main processor. However, various types of communication channel was well known in the art at the time was made. Therefore, it would have been obvious to one

Art Unit: 2122

having ordinary skill in the art to incorporate the teaching of the well-known knowledge into Mueller to have the secondary bus not interface directly with said main processor because one would want to utilize various types of communications channels to meet the requirement of various types of systems.

Claim 15 is rejected for the reason set forth in the rejection of claim 3.

Claim 18 is rejected for the reason set forth in the rejection of claim 3.

Claim 23 is rejected for the reason set forth in the rejection of claim 3.

As per claim 28, Mueller does not explicitly disclose the secondary bus additionally communicates with a graphical pointing device. However, a graphical pointing device was well known in the art at the time was made. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching of the well-known knowledge into Mueller to have the secondary bus additionally communicates with a graphical pointing device because it provides a user friendly interface to facilitates the communications between the user and the system.

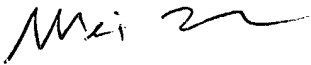
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wei Y Zhen whose telephone number is (703) 305-0437. The examiner can normally be reached on Monday-Friday, 8 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2122

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wei Zhen
Primary Examiner
8/4/2004